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ART UNIT

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2661

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5

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/658,330	STARR ET AL.
	Examiner	Art Unit
	Joshua Kading	2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3,7,8,17-21,24,26 and 27 is/are rejected.
- 7) Claim(s) 1,2,4-6,9-16,22,23,25 and 26 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 September 2000 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

5        The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

10       The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

15       The abstract of the disclosure is objected to because it exceeds the 150 word maximum. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

20       Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 states on lines 9-10 and 13-14 respectively, "generating DMs...based on diagnostic information" and "calculating a value for [a] quality of service of the communication based on the DMs." Claim 2 states, "the quality of service is calculated based on diagnostic information in the DMs." As such, claim 2 fails to further limit claim 1.

Claims 1 and 26 are objected to because of the following informalities:

Claim 1, line 13 states, "calculating a value for the quality..." It should read, -- calculating a value of a quality... --

5 Claim 26, line 12 states, "computer to managing". It should read, --computer to manage--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

10 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

15 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 7, 8, 17, 19, 20, 21, 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (U.S. Patent 5,774,656) in view Jones et al. (U.S. Patent 5,903,558).

In regard to claim 1, Hattori discloses "a method for managing performance information for a communication between communication system terminal endpoints communication of an Internet Protocol network (col. 19, lines 36-40 where this is taken 25 to say that TCP/IP can be used as a communication protocol in the network), comprising the steps of:

transmitting a Diagnostic Configuration Message from a Diagnostic Supervisor to at least one TE, wherein the DS is capable of being coupled to the at least one TE (col. 11, lines 27-37 where apparatus B is the TE, apparatus C is the DS, and the benchmark is the DCM);

- 5 generating Diagnostic Messages at the at least one TE based on diagnostic information concerning IP network transmissions in which the at least one TE participates, the DCM instructing the at least one TE how to format and under what criteria to transmit the DMs (col. 11, lines 37-41 where the results of the execution of the benchmark program is the DM and is sent back when the benchmark is finished
- 10 executing, and since the network is TCP/IP network, the TE must be able to format the DM correctly);

transmitting the DMs from the at least one TE to at least one DS (col. 11, lines 37-41 where the DM is clearly sent back to the DS from the TE)... ”

However, Hattori lacks “calculating a value for [a] quality of service of the

- 15 communication based on the DMs.” Jones however, discloses “calculating a value for [a] quality of service of the communication based on the DMs (col. 8, lines 13-18).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS with the rest of the method for the purpose of determining appropriate values for the QoS. The motivation being to be able to transmit
- 20 to the TE using the most efficient QoS.

In regard to claim 3, Hattori and Jones disclose the method of claim 1. However, Hattori lacks "the quality of service is based on communication parameters including at least one of the number of collisions, jitter, amount of lost packets, and amount of the network usage." Jones however, further discloses "the quality of service is based on

5 communication parameters including at least one of the number of collisions, jitter, amount of lost packets, and amount of the network usage (col. 8, liens 6-8 where the performance test lends itself to the QoS calculated and the increase or decrease in bandwidth is the amount of network usage)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the QoS based on bandwidth

10 with the method of claim 1 for the same reasons and motivation as in claim 1.

In regard to claim 7, Hattori and Jones disclose the method of claim 1. However, Hattori lacks "the method further includes adjusting the transmission parameters of each TE based on the quality of service." Jones however, further discloses "the method

15 further includes adjusting the transmission parameters of each TE based on the quality of service (col. 8, lines 33-49 where by changing circuit types with different characteristics the transmission parameters must be changed to accommodate the new circuit type)." It would have been obvious to one with ordinary skill in the art to include the adjusting of transmission parameters with the method of claim 1 for the same

20 reasons and motivation as in claim 1.

In regard to claim 8, Hattori and Jones disclose the method of claim 7. However, Hattori lacks "the adjusting the transmission parameters of each TE based on the quality of service is performed in real time." Jones however, further discloses "the adjusting the transmission parameters of each TE based on the quality of service is 5 performed in real time (col. 8, lines 33-49 where it is assumed the changing from one stream/circuit to another is done in real time to maintain the connection with the user defined QoS)." It would have been obvious to one with ordinary skill in the art to include the adjusting of transmission parameters in real time with the method of claim 7 for the same reasons and motivation as in claim 7.

10

In regard to claim 17, Hattori and Jones disclose the method of claim 1. However, Hattori lacks "the method further comprising the step of rerouting an IP network connection between two or more TEs to the public switched telephone network based on the determined value of the quality of service relative to a threshold value." 15 Jones however, further disclose "the method further comprising the step of rerouting an IP network connection between two or more TEs to the public switched telephone network based on the determined value of the quality of service relative to a threshold value (figure 3, where there are two networks, an IP network and a PSTN network; col. 6, lines 19-37 where the ISDN circuit switched data is carried over the PSTN)." It would 20 have been obvious to one with ordinary skill in the art at the time of invention to include the PSTN with the method of claim 1 for the same reasons and motivation as in claim 1.

In regard to claims 19 and 20, Hattori and Jones disclose the method of claim 1. However, Hattori lacks "the communication is voice, modem, facsimile, video or data transmissions." Jones however, further discloses "the communication is voice, modem, facsimile, video or data transmissions (col. 8, line 44 where it is stated that the call is a 5 data call)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the data communication with the method of claim 1 for the same reasons and motivation as in claim 1.

In regard to claim 21, Hattori discloses "a system for managing diagnostic 10 information for a communications system, comprising:  
a plurality of TEs capable of communicating over an IP network (figure 1, elements 101, 104, 107, 117 are all TEs; col. 19, lines 36-40 where this is taken to say that TCP/IP can be used as a communication protocol in the network); and  
a DS capable of being coupled to the IP network, wherein the DS transmits a 15 DCM to the TEs (col. 11, lines 27-37 where apparatus B is the TE, apparatus C is the DS, and the benchmark is the DCM); and  
wherein one of more of the TEs generate a DMs based on diagnostic information concerning IP network connections in which the one or more of the TEs participate, the DCM instructs the TEs how to format and when to transmit the DM to the DS...(col. 11, 20 lines 37-41 where the results of the execution of the benchmark program is the DM and is sent back when the benchmark is finished executing, and since the network is TCP/IP network, the TE must be able to format the DM correctly)."

However, Hattori lacks "the DS calculates a quality of service based on the information in each DM from each TE." Jones however, discloses "the DS calculates a quality of service based on the information in each DM from each TE (col. 8, lines 13-18)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS with the rest of the system for the purpose of determining appropriate values for the QoS. The motivation being to be able to transmit to the TE using the most efficient QoS.

In regard to claim 24, Hattori and Jones disclose the system of claim 21.

10 However, Hattori lacks "the quality of service is based on communication parameters including at least one of the number of collisions, jitter, amount of lost packets, and amount of the network usage." Jones however, further discloses "the quality of service is based on communication parameters including at least one of the number of collisions, jitter, amount of lost packets, and amount of the network usage (col. 8, lines 6-8 where the performance test lends itself to the QoS calculated and the increase or decrease in bandwidth is the amount of network usage)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the QoS based on bandwidth with the system of claim 21 for the same reasons and motivation as in claim 21.

20

In regard to claim 26, Hattori discloses "a computer program product comprising a computer usable medium having control logic stored therein for causing a computer to

[manage] diagnostic and performance information for communications system TEs communicating over an IP network (figure 1, where all the processors have some kind of computer usable medium having control logic stored therein as is known in the art; col. 19, lines 36-40 where this is taken to say that TCP/IP can be used as a

5 communication protocol in the network), the control logic compromising:

a first computer readable program code means for causing the computer to transmit a Diagnostic Configuration Message from a Diagnostic Supervisor to at least one TE, wherein the DS is capable of being coupled to the at least one TE (col. 11, lines 27-37 where apparatus B is the TE, apparatus C is the DS, and the benchmark is the

10 DCM);

a second computer readable program code means for causing the computer to generate Diagnostic Messages at the at least one TE based on diagnostic information concerning IP network transmissions in which the at least one TE participates, the DCM instructing the at least one TE how to format and under what criteria to transmit the DMs 15 (col. 11, lines 37-41 where the results of the execution of the benchmark program is the DM and is sent back when the benchmark is finished executing, and since the network is TCP/IP network, the TE must be able to format the DM correctly);

a third computer readable program code means for causing the computer to transmit the DMs from the at least one TE to at least one DS (col. 11, lines 37-41 where 20 the DM is clearly sent back to the DS from the TE)...”

However, Hattori lacks “a fourth computer readable program code means for causing the computer to generate a quality of service based on performance information

in the DMs." Jones however, discloses "a fourth computer readable program code means for causing the computer to generate a quality of service based on performance information in the DMs (col. 8, lines 13-18)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the calculating of the QoS with 5 the rest of the computer program product for the purpose of determining appropriate values for the QoS. The motivation being to be able to transmit to the TE using the most efficient QoS.

In regard to claim 27, Hattori and Jones disclose the computer program product 10 of claim 26. However, Hattori lacks "a fifth computer readable program code means for causing the computer to transmit the DMs to one or more TEs." Jones however, further discloses "a fifth computer readable program code means for causing the computer to transmit the DMs to one or more TEs (col. 11, lines 37-41 where the DM is clearly sent back to the DS from the TE)." It would have been obvious to one with ordinary skill in 15 the art at the time of invention to include the fifth computer readable program code means with the computer program product of claim 26 for the same reasons and motivation as in claim 26.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori 20 and Jones as applied to claims 1 and 21 above, and further in view of Drake, Jr. et al. (U.S. Patent 5,461,611).

In regard to claim 18, Hattori and Jones disclose the method of claim 1.

However, Hattori and Jones lack "the step of determining whether to terminate a communication based on the determined value of the quality of service relative to a threshold value." Drake however, discloses "the step of determining whether to

- 5 terminate a communication based on the determined value of the quality of service relative to a threshold value (col. 13, lines 63-67 and col. 14, lines 1-14 whereby a failure in the system that effects a communication leads to a degradation in the QoS by the very nature of the connection failure, therefore the communication is terminated)." It would have been obvious to one with ordinary skill in the art at the time of invention to
- 10 include the communication termination with the method of claim 1 for the purpose of allocating bandwidth to users with good connections. The motivation being not to waste resources.

***Allowable Subject Matter***

- 15 Claims 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

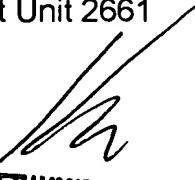
- 20 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or  
5 proceeding should be directed to the receptionist whose telephone number is (703) 305-  
3900.

  
Joshua Kading  
Examiner  
Art Unit 2661

10 JK  
December 5, 2003

  
KENNETH VANDERPUYE  
PRIMARY EXAMINER